


Message

From: Wray, Austin [Wray.Austin@epa.gov]
Sent: 9/7/2017 2:52:52 PM
To: Niman, Aaron [niman.aaron@epa.gov]
Subject: RE: Parkinsons/paraquat human study update

Wray, Austin has shared a OneDrive for Business file with you. To view it, click the link below.

 Paraquat_PD_Hand Lit Search_090617.xlsx

Sure thing. These were studies found after hand searching a few references.

Austin Wray, Ph.D.
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Office of Pesticide Programs
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(703) 347-8077

From: Niman, Aaron
Sent: Thursday, September 07, 2017 10:51 AM
To: Wray, Austin <Wray.Austin@epa.gov>
Subject: RE: Parkinsons/paraquat human study update

Thanks for looping me in – Do you mind forwarding the spreadsheet listed in this email chain for my general reference?

-Aaron

From: Wray, Austin
Sent: Thursday, September 7, 2017 10:40 AM
To: Skuce, Courtney <Courtney.Skuce@icf.com>
Cc: Engstrom, Anna <Anna.Engstrom@icf.com>; Blain, Robyn <Robyn.Blain@icf.com>; 'boydw@niehs.nih.gov' <boydw@niehs.nih.gov>; Pope-Varsalona, Hannah <Pope-Varsalona.Hannah@epa.gov>; Niman, Aaron <niman.aaron@epa.gov>
Subject: RE: Parkinsons/paraquat human study update

Hi Courtney;

As promised, I've looked over the studies and provided comments below. There were only a few differences from what was identified for extraction and one point of clarification. I have received little to no feedback from management on the risk of bias so I'm going to make the decision that we use the OHAT risk of bias tools. I looked them over and they seem like they will work well for our needs. I'm still attempting to get in contact with an expert in our office of research and development who could help with identifying "gold standard" for paraquat/parkinsons epi and animal studies, but I'm realizing that

may be a dead-end. We do, however, now have an epi person on board from my division! His name is Aaron Niman (cc'd above) and he is leading the general review of the paraquat epi literature. He will hopefully be at the meeting next week and can give you all a little bit more info on his background and how his and our projects overlap. Could you please give him access to the HAWC project page and include him in future emails? Thanks a bunch and sorry again for the delayed response.

Comments on the HAWC extraction:

Distiller ID 71, 5974, 6862, and 6865 – Agree with no additional comments

Distiller ID 99 – Agree and include the data on the polymorphism (Table 3)

Distiller ID 2526 – This one is a bit tricky since I am not familiar with the MRI measurements (DCavg, CPV, or FA), but based on their discussion it sounds like the data in Tables 3-5 are relevant a discussion on morphometric changes to the brain following paraquat exposure.

Distiller ID 2575 – I'm not sure if Table 1 needs to be extracted. It was looking at plasma activity which while useful may not be predictive of what is going on in the nervous system. I think we would end up using this information in our qualitative discussion of paraquat induced oxidative stress.

Distiller ID 6863 – It is possible that this statement is referring to the quaternary ammonium row in Table 3, but it's rather vague and without their raw data it is impossible to tell if that row also includes exposure to other quaternary ammonium herbicides. I would say exclude it because it is unclear if they assessed paraquat only exposure.

Distiller ID 6867 – These appear to be the same data presented in the book chapter from Kelly et al 1994 (Distiller ID 5974); however, this citation might be more appropriate since it is the original study.

Austin

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From: Skuce, Courtney [<mailto:Courtney.Skuce@icf.com>]
Sent: Wednesday, September 06, 2017 4:04 PM
To: Wray, Austin <Wray.Austin@epa.gov>
Cc: Engstrom, Anna <Anna.Engstrom@icf.com>; Blain, Robyn <Robyn.Blain@icf.com>; 'boydw@niehs.nih.gov' <boydw@niehs.nih.gov>; Pope-Varsalona, Hannah <Pope-Varsalona.Hannah@epa.gov>
Subject: Parkinsons/paraquat human study update

Hey Austin,

Another update for you. We've evaluated the 7 epi studies that we discussed at our last check-in that we found during our "hand search". The results are listed in the attached spreadsheet, along with the suggested extraction information for those that were included. I've also attached the full-texts of each of these articles, in case you would like to review those.

Please let us know if

1. You agree with our inclusion/exclusion evaluations
2. You have feedback on our extraction suggestions

Thanks!!

Best,



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